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ABSTRACT

Nine selected proceedings from a study institute discuss program alternatives for the education of deaf mentally retarded (MR) children along with such related issues as identification, size and scope of the problem, instructional approaches, curricular planning, instructional media, program funding sources, and vocational rehabilitation. The discussion of identification of deaf MR children is concerned with the basic behavioral characteristics of the population, with what standardized tests can be used for evaluation purposes and by whom, and with constructive action following identification. The size and scope of the problem with MR deaf persons in New York is treated in two articles. Reviewed are programs for MR deaf children in New York state schools for the deaf. Educational programming for MR deaf children is said to begin with gross communication defined as isolated gestures with predetermined meaning. The instructional media services and captioned films branch of the Division of Educational Services from the Bureau of Education for the Handicapped are explained. Two papers treat program funding. State and federal programs for vocational rehabilitation are explained. (GW)

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PREFACE

This report contains the papers that were presented during the Special Study Institute on Deafness and Mental Retardation held at the New York State School for the Deaf in Rome, New York, on May 18-19, 1972. Approximately 100 professionals working in the two fields of deafness and mental retardation were in attendance at the institute, which was the first of its kind in the state.

The purpose of the institute was to discuss program alternatives for the education of deaf mentally retarded children and to consider such related issues as identification, size and scope of the problem, instructional approaches, innovations in curriculum planning, instructional media, and program funding sources.

At the end of the report are sections on Vocational Rehabilitation and recommendations from the group discussions held during the institute. The section on Vocational Rehabilitation was not presented during the institute due to time limitations, but appears here to add an important dimension to the services that are discussed in relation to mentally retarded deaf children. The recommendations from the group discussions appear due to their potential value in catalyzing agency and school activities on behalf of mentally retarded deaf children.

The Editor and institute Director wishes to thank the following individuals for their part in making the institute a success: Dr. Richard G. Hehir, Dr. Beatrice Jacoby, and Mr. Joseph Piccolino, Bureau for Physically Handicapped Children, State Department of Education; Mr. Donald Morelli, Department of Mental Retardation, Division of Mental Hygiene; Mr. Jay Farman and his staff, New York State School for the Deaf; the institute speakers, and the institute participants. Special appreciation is due Miss Janet Winslow of the Deafness Research & Training Center, who worked long and diligently helping to prepare for the institute and who typed this manuscript.

It is hoped that this report will be read by all concerned with mentally retarded deaf children and that the ideas contained herein will lead to more and better educational programs for a group of children who need our help.

Larry G. Stewart, Ed.D.
Editor

June, 1972

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OPENING REMARKS

Richard G. Hehir, Ed.D.
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The Division for Handicapped Children sponsors from between fifteen to twenty Special Study Institutes each year for teachers and administrators involved in the education of handicapped children. It is recognized that teachers of the handicapped, once they have completed their teacher preparation programs and enter an educational system or school, will need continuous retraining and upgrading in order to adequately deal with the educational needs of the handicapped children in their charge. These Special Study Institutes have as their goal assisting teachers of the handicapped in becoming more adequately prepared to instruct their handicapped children. Each Institute addresses itself to a recognized area of need. One of the greatest areas of need that we presently have is that of providing adequate educational services to multiply handicapped children, particularly those deaf children who have the additional handicap of mental retardation. Such multiply handicapped children present great challenges to the teachers working with them regardless of setting. Those of you who are with us today instruct such multiply handicapped children in public schools, in special schools for the deaf, in schools operated by the Department of Mental Hygiene, in community agency programs and in Boards of Cooperative Educational Services. We are very pleased that all of you are able to be with us for these next two days.

The Bureau for Physically Handicapped Children is pleased to be cosponsoring this institute with the Department of Mental Hygiene represented by Mr. Donald Morelli and with the New York University Deafness Research & Training Center represented by Dr. Larry Stewart. It is through such cooperative arrangements that the needs of children, regardless of their placement, may be adequately served. All teachers need to communicate with each other and share their ideas and experiences since the children themselves are not and should not be permanently placed in one setting if there is any possibility for their improvement and advancement in different educational settings. I believe that this is one of the first institutes wherein we have brought together people from so many agencies concerned with the mentally retarded deaf child. Resources, both personnel and financial, are scarce and it will only be through new cooperative ventures wherein a sharing is possible, that we will be able to overcome the awesome challenges which multiply handicapped children present to us.

The New York State School for the Deaf at Rome and the Rome State School have been cooperating and sharing in trying to approach

the problems of mentally retarded deaf children in this area. The BOCES, Suffolk County #3 and the Suffolk State School are also co-operating to meet the needs of blind mentally retarded children in that area. These kinds of cooperative ventures must continue and even closer relationships must be developed and promoted if we are to adequately meet the needs of all children and particularly the children with multiply handicapping conditions.

We are grateful also to the New York State School for the Deaf and particularly Mr. Jay Farman who is hosting this Conference while still operating a total educational program for the children attending this School. Certainly Dr. Stewart, who has worked diligently to promote the Conference and provide outstanding speakers is also to be recognized and congratulated. I look forward to sharing the next several days which have been planned for us.

IDENTIFICATION OF MENTALLY RETARDED DEAF CHILDREN

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The purpose of this paper is to discuss procedures that can be used to identify children who are both deaf and mentally retarded. Our concern will not be limited to the use of a psychological evaluation to establish an I.Q. score that meets legal definitions for mental retardation. Rather, we will be concerned with the basic behavioral characteristics of this group of children, how large this population is, what standardized tests can be used for evaluation purposes and by whom, and how we may do something constructive after we have identified a mentally retarded deaf child.

Behavioral Characteristics

Certainly professionals as well as parents and laymen first begin to question the child's internal makeup or abilities when his behavior deviates from the norm. The behavior of many mentally retarded children is in many respects similar to the behavior of children with some forms of emotional disturbance as well as children with some kinds of brain damage; the common denominator is usually slow development, difficulty in learning, social immaturity, and the like. There is also slow development in the areas of language usage and verbal or spoken communication, and it is here that we run into the not uncommon mistake of assuming that language and communication problems are necessarily symptoms of mental retardation.

For our purposes, however, the initial step which usually takes place in the process of identifying a mentally retarded deaf child is for the parent, physician, or teacher to note deviation in the child's behavior. At this point referral should be made to a psychologist who is capable of making a reliable and valid assessment of the deaf child's abilities. In cases of severe retardation the prerequisite for a specialist in deafness may seem less of a problem since the child's behavior is quite removed from the norm, but in reality a psychologist who is experienced in working with the deaf is always essential for proper diagnosis.

In the first place, such a psychologist will know which tests to use with a deaf subject and, more importantly, he will know to administer the test in such a way that the child's communication problem will not lower the test score. Secondly, he will interpret the performance test results in terms of the child's functioning on individual subtests. I shall have more to say on this later on. Finally, he will not confuse the language and/or speech deficiencies of most deaf children with those of many retarded children.

To underscore this point concerning the use of a qualified psychologist, many deaf children of normal intelligence have been diagnosed as mentally retarded by psychologists who have used such tests as the Stanford Binet or the Verbal Scales of the Wechsler tests.

To return to the subject of behavior, Kirk (1962) has presented the following categories to describe the functioning and capabilities of four groups of mentally deficient individuals:

- a. The Slow-Learning---Those who are not considered mentally retarded because they are capable of achieving a moderate degree of academic success even though at a slower rate than the average child. They are educated in the regular classes without special provisions except an adaptation of the regular class program to fit slower learning ability. At the adult level they are usually self-supporting, independent and socially adjusted.
- b. The Educable Mentally Retarded---Those who, because of slow mental development, are unable to profit to any great degree from the programs of the regular schools, but who have these potentialities for development: (1) minimum educability in reading, writing, spelling, arithmetic, and so forth; (2) capacity for social adjustment to a point where they can get along independently in the community; (3) minimum occupational adequacy such that they can later support themselves partially or totally at a marginal level. The term "educability" then refers to minimum educability in the academic, social, and occupational areas.
- c. The Trainable Mentally Retarded---Those who are so subnormal in intelligence that they are unable to profit from the program of the classes for educable mentally retarded children, but who have potentialities in three areas: (1) learning self-care in activities such as eating, dressing, undressing, toileting, and sleeping; (2) learning to adjust in the home or neighborhood, though not to the total community; and (3) learning economic usefulness in the home, a sheltered workshop, or an institution.
- d. The Totally Dependent Mentally Retarded---Those who, because of markedly subnormal intelligence, are unable to be trained in self-care, socialization, or economic usefulness, and who need continuing help in taking care of their personal needs. Such children require almost complete supervision throughout their lives since they are unable to survive without help.

The Size of the Population

We may turn now to a brief discussion of the size of the population of mentally retarded deaf children. Unfortunately, we do not have

exact statistics for this purpose. However, we can extrapolate from several classes of data and gain a rough approximation of the number of mentally retarded children in New York State.

Wechsler (1958) has suggested that approximately 10% of the population may be classified as mentally deficient. With the deaf population in New York State estimated at approximately 18,000 this would suggest that around 1,800 of them are mentally deficient since the distribution of intelligence among the deaf has been demonstrated to parallel that among the hearing (Vernon, 1968).

A more exact study conducted by the Temporary State Commission to Study the Problems of the Deaf (1971) reported that 7%, or 64, of the educable and trainable retarded between the ages of 6 and 30 years in the Rome State School were deaf, with this exact percentage (7%) or a N of 46, reported for a similar population at the Newark State School. With no figures available on the exact number of mentally retarded deaf children who are in public day classes for the deaf, residential schools for the deaf, or living at home, it seems safe to say that we are concerned with a significant population that is deserving of better identification procedures.

Psychological Evaluation

The actual psychological evaluation of a deaf child who is being screened for possible mental retardation requires a differential diagnosis approach that only a psychologist experienced in working with the deaf can perform. As Vernon (1970) has pointed out, tests given to deaf persons by psychologists not experienced with the deaf are subject to appreciably greater error than is the case when the service is rendered by one familiar with deaf persons.

One of the first facts that must be established is whether the child is in fact deaf. This determination is decidedly complex. Surprisingly, even today there is no commonly accepted definition of deafness but, rather, definitions used by various disciplines. Educators tend to lean toward a functional definition, whereas medicine and audiology generally depend upon results from technical auditory examining procedures. For education and training purposes, it would be reasonable to define the deaf child as one who depends upon his vision for receptive communication purposes. Stated another way, if the child in the classroom is unable to receive and interpret spoken language as a consequence of a defect in his hearing apparatus, he may be classified as deaf.

Once the psychologist knows the child is in fact deaf, he may proceed with testing to determine intellectual functioning. He keeps in mind, however, that a test score alone is rarely accepted as the sole criterion for determining the presence of mental retardation. The official definition of the American Association on Mental Deficiency requires that a suspicion of mental retardation

established on the basis of measured intelligence be confirmed by a clinical judgment as to the individual's actual adaptive behavior (Gill, 1964). The reason for this, as Wechsler (1958, p. 50) points out, is

A mental defective is characterized not only by a lack of ability to care for himself but also by an incapacity to use effectively the abilities he does have. . .

. . . It is generally necessary in making a diagnosis of mental deficiency to take into account factors other than sheer lack of intellectual ability.

Thus, the psychologist is interested not only in obtaining a test score but also in observing and interacting with the deaf child, discussing the child's behavior with teachers and parents, and reviewing background information on the child.

Instrumentation. Vernon (1967) has presented an excellent set of guidelines for the psychological evaluation of deaf adults. With considerations related to developmental factors and age, these guidelines are quite helpful to those who work with children. The Wechsler Scales---the Wechsler Intelligence Scale for Children and the Wechsler Adult Intelligence Scale---are excellent instruments for use with deaf individuals. The Performance Scales should be used to determine the I.Q. (never the Verbal Scales). The Verbal Scale may be used to obtain an indication of the extent to which deafness has affected language development, but usually these scales can only be administered when both the examiner and the subject can use manual communication and when the subject has borderline intelligence or higher.

The subject's scores on the subtests of the Wechsler should be examined closely. The scatter of scores may in itself be unmeaningful, but when a child scores 10 or higher on the more reliable and valid subtests, such as Block Design, and 3 or 4 on the less reliable subtests, such as Digit Symbol, then the resulting low I.Q. score is most likely an underestimation of intelligence.

The Leiter International Performance Scale is another performance test that provides a reliable estimate of a deaf child's intelligence, although care must be taken not to use it with a child who has a visual impairment. The Leiter Parkington Adult Performance Scale can be used with deaf adults.

Raven's Progressive Matrices can be used with deaf subjects nine years and older. This test provides a good second test to corroborate results from the WISC or WAIS. Similarly, the Revised

Beta test can be used with fairly reliable results with deaf people 16 years and older.

Personality testing with mentally retarded deaf children and adults is a dubious procedure. However, the Draw-A-Person test can be used with children nine years and older, and the House-Tree-Person test can be used with school age children through adulthood. The Bender-Gestalt can also be used with children ages 12 years through adulthood for detection of brain damage.

There are many useful tests that can be used for evaluating mentally retarded deaf children for educational programming purposes. Such tests are listed in a manual by Crammatte (1970). The areas of vision, motor coordination, and visual perception are particularly critical for training purposes.

The Question of Multiple Handicaps

With the expansion of programs for the handicapped has come some confusion among professionals as a result of new terminology used to describe educationally significant problems. One of the most outstanding examples of this is the term "multiply handicapped."

Some professionals use the term to refer to children with multiple handicaps of various kinds, while others use the term to refer to children with multiple physical disabilities. There seems to be a practice of labeling deaf children with learning disabilities as multiply handicapped, while deaf mentally retarded children are not listed in this category. This appears to create unnecessary confusion in the minds of professionals and laymen alike. It would seem reasonable and helpful to improve our use of terms, for if a mentally retarded deaf child is not multiply handicapped then who is? This point is raised because brain damage, emotional disturbance, and mental retardation are frequently found to exist in the same person. In fact, in most cases we find overlapping components of each.

The General Problem of Identification

Now that we have considered the meaning of mental retardation and deafness and psychological evaluation, it appears important to consider several broader issues that pertain to identifying mentally retarded deaf children.

The first of these seems to be: why identify mentally retarded deaf children? It would be tragic if we are concerned only with identifying these children in order to exclude them from regular classrooms. Sadly, this happens often enough for this point to be mentioned. On the other hand, if we are concerned with identifying such children in order to assure proper educational programming then it is obvious that we need a variety of educational programs

to meet their needs. The more able mentally retarded deaf children can benefit from special classes in public schools and in schools for the deaf, while the more retarded need the assistance that can best be provided in a special school for the retarded.

What is suggested then, is that we need, first of all, diagnostic programs where mentally retarded deaf children can be evaluated to determine their educational needs. We also need different types of educational and custodial programs to meet the needs of these children. Most importantly, we need a mechanism--a system--to ensure that such children reach these diagnostic centers and then are placed in the proper educational setting. Too many multiply handicapped deaf children--including those who are mentally retarded--are sent from pillar to post because of the lack of suitable programs or the lack of a channel that will ensure that they are given proper placement. Identification under these circumstances becomes meaningless; the problem is known, but there is no solution.

It would seem reasonable to establish classes for the more capable mentally retarded deaf within BOCES programs, special classes for the deaf in public schools, and within residential schools for the deaf. With such a network of services, and a strong system of coordination so that the children could move into the proper program as their needs dictate, proper identification can become truly meaningful.

In closing my remarks, I would be remiss in not mentioning that to my knowledge there is no university in the State of New York that offers professional preparation in working with deaf mentally retarded children.

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THE MENTALLY RETARDED DEAF IN NEW YORK: SIZE AND SCOPE OF THE PROBLEM
A DAY SCHOOL'S RESPONSE

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and
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This meeting today is one of many indicators of an increasing interest in the needs of the deaf retarded. At this very time the American Association on Mental Deficiency is convening in Minneapolis and will have its first workshop on the deaf retarded. These concurrent meetings provide the focus necessary to dramatize the needs and develop responses to these needs of a very special population. In recent years there have been encouraging signs of interest, notably the studies of Anderson (1966), Doctor (1959), Hirshoren and Lloyd (1972), and Darnell (1971). Additionally, a directory compiled by Hall and Talkington (undated) and published by the Joint Committee on Deaf Retarded of the A.A.M.D. and the Conference of Executives of American Schools for the Deaf, the April 1972 edition of the American Annals of the Deaf, and the New York State comprehensive program for the deaf retarded, sponsored by the Temporary State Commission to Study the Problems of the Deaf---all have contributed immeasurably in providing information on existing services and in establishing a framework in understanding some of the unmet needs.

A review of some of the existing literature indicates that programs for the deaf retarded throughout the United States take many forms including:

1. residential schools for the deaf
2. residential schools for the retarded
3. day school programs for the deaf and/or retarded
4. experimental programs in residential setting exclusively for the deaf retarded.

It should be noted at this point that the needs of many deaf retarded are not being met at all.

I will address myself briefly to one type of program provided---the day school. Junior High School 47, the School for the Deaf, has provided this program since 1937 and presently provides instruction for forty-five educable and trainable deaf students. To understand this

special program, let me put it into context by providing a very brief picture of the entire school.

Junior High School 47 serves six hundred and thirty students who are transported on 34 school buses from all boroughs of New York City except Staten Island. Students range in age from 2 years 8 months to seventeen years. The largest grade level consisting of twenty-three classes is the second grade which we refer to as our "rubella bulge." My primary supervisory responsibilities are to this group and to the classes for the retarded. Eighty-five per cent of the school's population has an eighty decibel loss or greater in the better ear. The remaining fifteen per cent have losses slightly below eighty decibels, but have multiple handicaps that preclude their functioning in a regular school program. Approximately seventy per cent of the school's population is multiply handicapped, that is, they possess a documented second handicap in addition to deafness. A large number, in fact, have three, four, five and even as many as six additional handicaps.

Approximately seventy-two per cent of our students come from families receiving some form of public assistance. Our population is made up of fifty-two per cent Puerto Rican, twenty-six per cent Negro, twenty-one per cent White, and one per cent Oriental students.

I would now like to address myself to the specific program for the deaf retarded at Junior High School 47, Manhattan. I might add, parenthetically, that in this examination of the program it would be useful to remember that students not labeled "retarded" are functioning in classes for the slow learner within the school. And, if past experiences are any indication, some of these students may eventually be placed in classes for the retarded. Moreover, students presently in classes for the retarded deaf may eventually be placed in regular classes for the deaf.

Let me provide you with a capsulized description of our retarded deaf population. As I have stated, there are forty-five students in the program. Of these, eleven are trainable and comprise two classes. The remaining thirty-four are educable and are divided into five classes.

The age range for both groups is eight to seventeen years, with a median of fourteen years.

The I.Q. range in the trainable classes runs from 21 to 58 with a median of 50. The I.Q. range for the educable classes runs from 50 to 74 (the cut-off point for placement in these classes) with a median of 62. Three students are listed as having undetermined I.Q.'s.

For the trainable group the range of hearing loss in the better ear is from 87 to 110 decibels. For the educable deaf the range is from 72 to 110 decibels. The median loss in the better ear for both groups is a 95 decibel loss. The records indicate that the audiograms of six of the students are unreliable.

Students in both the trainable and the educable classes range in age upon admission to some type of school program from four to fifteen years, with a median age of six and a half years. They range in age from seven to fifteen years upon admission to classes for the retarded with a median age of nine years.

Eighty-five per cent of the retarded deaf population of Junior High School 47 have at least one additional handicap. Included in these documented additional handicaps are epilepsy, aphasia, coronary imperfections, autism, visual and perception problems, motor dysfunction, cerebral palsy, and emotional disorders.

Sixty-eight per cent of the families of students in Junior High School 47's program for the deaf retarded receive public assistance.

In understanding the placement of students in these programs, it is important to realize that every student is re-evaluated every two years, and very often every year, if the need is indicated. In the past years students have been placed in regular classes for the deaf as a result of this re-evaluating process.

The staff servicing the retarded deaf consists of seven teachers and one resource teacher with teaching experience ranging from 3 to 31 years and a range of 1 year to 17 years in teaching the deaf retarded. With regard to training, three teachers are licensed and/or certified as teachers of the retarded. Four teachers hold licenses and/or certification as teachers of the deaf. One teacher is licensed in both the deaf and retarded areas. In addition to the supervision and assistance provided by the school, services and conferences conducted by the Bureau for Children with Retarded Mental Development are provided for these teachers.

It might be noted here that in addition to the forty-five deaf retarded students served by Junior High School 47, the Board of Education of the City of New York provides itinerant lipreading services once or twice a week to approximately forty-five hard of hearing educable and trainable retarded students who are enrolled in elementary and secondary classes for the retarded in various districts throughout the city. The hearing losses of these students range from twenty-five to seventy-five decibels in the better ear. This program is administered and supervised by P.S. 158, Manhattan, the School for the Language and

Hearing Impaired. Several of these students have recently been placed into J.H.S. 47's program for the deaf retarded.

The program content at J.H.S. 47 is built upon curricula designed for both the deaf and the mentally retarded and is adapted to the needs of the retarded deaf. The major objective is to develop each child to his full potential. Students are integrated in many of the school's activities. For example, the three older educable classes participate in a health education program with regular deaf classes. Also, teenage retarded deaf students belong to our after-school center, attend special parties and dances, and participate as members of teams in our inter-scholastic basketball and softball squads which compete with regular hearing junior high schools in the borough of Manhattan.

All classes, except the youngest trainables and new admissions, attend and participate in school assembly programs with deaf students at their levels. One of the highlights of the assembly presentation was a recent program offered by three of our deaf retarded classes in which they applied training they had received in our motor development program. It was marked by the highest degree of audience participation I have witnessed in my thirteen years at the school. An encore presentation was given for students in regular retarded classes in a neighboring elementary school. This is an ongoing reciprocal arrangement.

To provide enrichment for the deaf retarded, students are programmed for two to three periods per week in the industrial arts and home economics programs. Additionally, they receive art or arts and crafts instruction by specialists in these areas. As a result of this program the deaf retarded produce fine exhibits for our school-wide annual art show. Classes of retarded deaf also receive the services of a teacher audiologist, including a special auditory training program. The older educable mentally retarded receive additional instruction in typing. In addition, a rich excursion program affords the retarded deaf an opportunity to use the city as a classroom.

Among the special services provided for the retarded deaf at J.H.S. 47 is a highly specialized physical education program conducted by a resource teacher supplied by the Bureau for Children with Retarded Mental Development and the Bureau for Health and Physical Education. The resource teacher is assigned to our school one-half day per week. He provides demonstration activities to equip our classroom teachers with the means of developing meaningful programs in the areas of perception and motor development. This program stressing physical, social, intellectual and emotional objectives stems from a body of research documenting the special needs for motor and perception training in the developmental program for the retarded.

To provide our older deaf students valuable preparation for vocational placement, a pseudo-work experience program has been developed. Students work for a brief period within the school ranging from thirty to sixty minutes per day on a rotating basis in areas such as delivering supplies to teachers, aiding young deaf children in the lunchroom, assisting in the maintenance of the teachers' library, providing clerical assistance to the school secretaries, etc. Pupils are evaluated and are rated for their performance and receive points which they can exchange for prizes at intervals during the year. Contributing to the eventual vocational placement are the guidance services and evaluations provided by the school and referrals to the Office of Vocational Rehabilitation for job training and placement.

This year we inaugurated a special travel training program which was directed to the teenage retarded deaf student who had not learned to travel independently between his home and school. Although the majority of our students generally acquire this skill prior to graduation, the program supplied by the Bureau for Children with Retarded Mental Development has been an invaluable asset in training most of those who do not acquire this skill independently. We were fortunate in being able to obtain a former student, now a college graduate, in the position of travel-trainer paraprofessional on a part-time basis.

Our students also participate in the Olympics for the retarded. This week the city-wide competitions are taking place. Last year one of our students was a New York City representative and a medalist in the state-wide competitions held in Rochester.

During this past year J.H.S. 47's department for the deaf retarded has been exploring the possibility of utilizing computer-assisted instruction and the services of both the Special Education Resource Center at Hunter College and a new center recently established by the Board of Education of the City of New York.

We are also seeking the establishment of affiliations with New York University-Bellevue's Rubella Project and the Institute for the Retarded at Flower Fifth Avenue Hospital for the purpose of improving diagnosis, evaluation and other services.

In examining our program and other programs for the retarded deaf, certain needs seem apparent.

First among these needs would be improvement in diagnosis and evaluation in the areas of hearing and intelligence. As pointed out by researchers in the area and borne out by our experience in reviewing

records at admission, the accuracy of audiometric measurements, especially with the young mentally retarded student, is often related to central nervous system pathology and/or behavioral patterns rather than being an accurate indication of hearing ability.

The appraisal of intelligence is a uniquely difficult problem with the deaf retarded. Research in this area reports some dramatic mis-diagnoses of deaf students, one of whom was placed originally in a class for the deaf retarded and later obtained a college degree. The need for constant reappraisal, as described in our program, seems appropriate.

In both areas of evaluation, hearing and intelligence, the following recommendations seem to be indicated:

1. Research directed to improving, interpreting, and developing instruments of evaluation.
2. Better definitions and nomenclature related to categorizing the deaf retarded student.
3. A greater reliance on differential diagnosis based on functioning and adaptive behavior.

A second need is for wider variety in placement, including:

1. Expansion of day classes for the deaf retarded.
2. The establishment and expansion of residential placement in both schools for the deaf and schools for the retarded for those students unable to function in day class settings, and
3. The possible establishment of a special center for the deaf retarded which could serve as a focus for research and training in that area.

A third need exists in the area of teacher training. Responses might include: 1) the establishment of dual certification or licensing in the areas of deafness and retardation and 2) the creation of special institutes and teacher training programs addressed to the dual specialization of deafness and retardation.

A fourth need is in the area of curriculum development. The institutes and training programs mentioned above could address themselves in particular to the development of curricula, and the exploration of

objectives, methods and material in this area of specialization.

A fifth need would be the expansion and improvement of vocational training, placement, and rehabilitation for the deaf retarded.

Anderson in his study found that there existed a prevailing negative attitude toward the deaf retarded. Perhaps, this meeting is an indication that educators are seeing beyond the handicaps and focusing on the child whose potential has not yet been fully tapped.

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THE MENTALLY RETARDED DEAF IN NEW YORK: SIZE AND SCOPE OF THE PROBLEM
DEPARTMENT OF MENTAL HYGIENE STATE SCHOOLS

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Society's institutions for the residential housing of the mentally retarded in New York State are called State Schools. They are fourteen in number and are located throughout the State. They are operated as a function of the New York State Department of Mental Hygiene. These institutions have come to be called Schools, having previously been called custodial asylums, asylums for incurable idiots, and the like. The residents of the State Schools number approximately 26,000. Many of the individual schools house over 3,000 residents. Approximately 15% of all of the institutionalized retarded in the United States are being cared for in the State Schools of New York State.

The residents of the State Schools are alike only in that they are human beings and were considered as being mentally retarded upon admission. They are different in sex, although there are significantly more males than females; age, representing all ages from birth to ninety or more years; level of retardation, from profoundly retarded to mildly retarded and in some cases non-retarded; cause of retardation, every conceivable cause of retardation is represented; and in the number and kinds of other assorted conditions, handicaps and disabilities which they may have in varying combinations and degrees. One of these other conditions, handicaps or disabilities, deafness, is our subject of concern today.

The State Schools are very paradoxical institutions. While not generally acclaimed for earth shaking contributions in advancing the art of caring for, habilitating and educating the retarded, there is much good work with excellent results being done to make the institutions worthy of the name "schools". At the same time things have been, and still are being discouragingly overlooked. One aspect of this in the area of resident care has recently and dramatically been brought to the attention of most of us by the mass media. While we all hope that this recent exposure will in some way lead to productive change, we here have the opportunity of effecting in a less dramatic and perhaps more positive way, a change in another area where we also have little to be proud of, habilitation of our deaf retardates.

I do not mean to give the impression that there has not been much concern for the deaf, because there has, and I will later describe some of the very fine things that are being done at several of the State Schools in this regard. However, this has been for the

most part recent, as members of various professions not previously involved with the institutions have become involved. This is seen as part of the institution's continuing emergence as an educational and rehabilitative facility from its heritage as a warehouse for society's misfits.

The awesome size of the population, 26,000, makes even a survey of the incidence of deafness among the residents a monumental task; also a task which will include some built-in error. A survey conducted by the Department of Mental Hygiene in 1971 indicated that there were 445 deaf residing in its State Schools, 1.7 percent of the institutionalized population. Six point three percent were identified as being hard of hearing. Over a two year period this represented an increase in the incidence of deafness from 1.6% and an increase in the number of residents reported as being hard of hearing from 5.5%. In these two studies attendants were asked to indicate which residents under their care were deaf and which were hard of hearing. Incidentally, other studies have shown that there is 88% agreement between professional evaluators and ward attendants when asked to identify residents as being of normal hearing, hard of hearing or deaf. It is assumed that one major reason for the increase in the reported incidence of deafness over the two year period was the implementation of speech and hearing programs at several of the State Schools which began in January 1970.

A survey of nine heads of State School Speech and Hearing Departments which I conducted in preparation for this meeting resulted in a reported incidence of deafness of from 1.1 percent to 11.1 percent with the most reporting between 1 and 2 percent deaf for their institutions. It was of interest that the working definition of deafness differed somewhat at the several State Schools from a rather inclusive "lack of hearing for speech when presented at a level of 75 db." to a rather severe "eliciting no response at any frequency at the maximum output of the audiometer".

Dr. E. Harris Nober, Professor of Audiology and Speech Pathology at Syracuse University and a staff of nine audiologists conducted an extensive research project published in 1968 using the nearly 4,000 residents of the Rome State School, which attempted to "assess the hearing of a large number of institutionalized mentally retarded subjects and explore more efficient means of testing large groups". In his statement of the problem, Nober cited 49 studies conducted between 1951 and 1968 which reported the incidence of hearing loss for the retarded to be anywhere from 6 to 65 percent, with the mode, median and mean between 25 and 29 percent. Among Nober's major conclusions were that 43 percent of the population studied failed an audiometric screening based on a 30 db. criteria and that individual screening was preferable to group screening.

It can be seen that while there is some disagreement as to the incidence of deafness, or of hearing loss in general among the institutionalized population, which may be based at least in part on differences in the operational definition of what is being measured in each study, the incidence of hearing loss and deafness is higher for this group than for the general population.

Nober, in his discussion, makes two other points which are particularly noteworthy: that sensitivity is not the only critical factor in assessing hearing ability, as many of the retarded have both peripheral and central dysacuses along with a defective sensitivity threshold; and that mentally retarded patients as a group are more susceptible to middle ear impairments because of poor health habits, inability to care for themselves appropriately and inability to relate their early symptoms of hearing difficulty.

In the survey which I recently conducted to find information relative to what was being done for the deaf retarded at the various State Schools, I asked nine of my colleagues the following questions: Do you have a program for the deaf retarded ages 3 to 9, and if not do you anticipate developing such a program?

Of the seven who responded, 5 indicated that they had such a program. Each described his program similarly to consist of providing speech and language therapy with speechreading and auditory training to individual or small groups of deaf residents in a clinical setting. Of the two respondents who indicated that they had no program, one, from a very small school, indicated that there were no identified deaf within the age range and the other heads a department not sufficiently developed to have such a program. In regard to future development, two respondents indicated this was not their intention because they felt there were too few cases. Five indicated they did have plans in this direction but also indicated a desire to have their residents accepted by a school for the deaf or by a centralized deaf program of some type.

When asked if they advocate an oral, manual or combined approach to working with the deaf retarded, four respondents indicated preference for an exclusively oral approach and 3 advocated a combined approach.

When asked if they felt deaf retarded residents should be isolated from other residents during educational activities, recreational activities, at meals, on the ward or in the dorm, the respondents were unified in their response, that the deaf should be totally integrated with the possible exception of during specialized educational or therapeutic activities.

Does a deaf person have any business being in a school for the retarded in the first place? When asked that very pointed question, one respondent answered a flat no; one said yes, if deafness were secondary to retardation; one replied yes, but only if proper services were provided; one replied yes depending on how the diagnosis of retardation was arrived at. Two felt that such placements were very questionable; and one respondent felt it was too hot a question to answer on a survey form and that he would have to think about it further.

Some examples of the attention being given the deaf at some of the State Schools include a program at the Craig State School. Deaf residents who are not felt to be able to learn speech are taught fingerspelling in group sessions which include the attendant staff of their wards. This gives the resident someone to communicate with besides the therapist. Also at Craig, some of the deaf residents are being included in a speech and language program and are being provided with amplification by means of hearing aids and auditory training equipment. Help in selecting appropriate amplification is provided by visits of the mobile hearing unit owned by Ithaca College.

At the West Seneca State School a teacher of the deaf was employed during the 1968, '69 and '70 summer school program. Plans were made to employ her on a full time basis during the current year, but unfortunately this did not come about. She had been working with a group of ten residents in the 7-to-18-year range. These residents are currently being seen regularly by speech and hearing therapists and there is hope that they may be accepted by the neighboring school for the deaf.

At the Rome State School deaf residents are programmed with the hearing residents in the educational program, the behavior modification training center program, in the pre-vocational workshop and for the various therapeutic services such as O.T., P.T. and recreation. The personnel working in these programs and providing these services are given supportive help and information, in addition to that which they may have, in ways to adapt their activities so that the deaf residents will be able to participate in and profit from them. This type of help is provided by speech and hearing personnel and is done individually and on an institution-wide basis through inservice education. Equipment such as Phonic Mirrors, auditory trainers, and therapy soft-ware are provided to interested employees of various departments so that they may work individually with deaf residents. Amplification is provided by means of individual hearing aids and auditory trainers. Formal arrangements have been made with the Children's Hospital Hearing and Speech Center of Utica to assist in the proper selection of such aids.

Individual and group therapeutic services in the areas of speech and language, speechreading and auditory training are provided to deaf residents who are felt able to profit from them on a scheduled basis. There is a very fine ENT Clinic which cares for the otological needs of the residents, and is prepared to perform surgery, including stapedectomy, in the institution hospital.

It is felt that these are worthwhile and valuable services which are being provided to our deaf residents, however it is acknowledged that there is something missing. In programming for the deaf resident there is input from a variety of professionals including speech pathologists, audiologists, psychologists, teachers of the retarded, medical people, social workers and ward personnel. It is felt that each has a good understanding of the deaf, but within his specific frame of reference. There is, however, no input from the deaf education community. Many attempts have been made to have our residents included in programs at schools for the deaf with little success. Some were accepted by us after having been dismissed by a school for the deaf.

There appears a need for a combined program, perhaps like the one suggested in March 1970 at a meeting of various professionals and members of the Temporary Commission to Study Problems of the Deaf which was held at the Rome State School. The program must be philosophically acceptable to those involved and allow for the maximum creative input from a variety of interested professionals, most of whom have come to the realization that they cannot adequately meet all of the needs of the deaf retarded resident by themselves. We know that combined we have the talents, and we certainly have the clientele, what we appear to need is cooperative organization; I guess a little money would help too.

THE MENTALLY RETARDED DEAF IN NEW YORK SCHOOLS FOR THE DEAF

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The purpose of this paper is to present a review of programs for mentally retarded deaf children in schools for the deaf within the state of New York. In order to provide current information, a survey was devised and sent to nine schools for the deaf. For purposes of definition, these nine schools are considered by the State Education Department to be State Supported or State Operated Schools; they are facilities exclusively for deaf children and are both day and residential. Public School #47 in New York City was not included in this survey, but will be reported on separately at this meeting.

Of the nine schools to which questionnaires were sent, eight were completed and returned. Appreciation is gratefully extended to the administrators of these schools for their cooperation and candid manner in answering the questions. The replies indicate a sincere concern for the placement and education of deaf mentally retarded children.

It should be made abundantly clear that the survey sent to the schools was hastily drafted, and in no way was a scientifically devised investigation. An educationally conceived definition and classification scheme for retarded deaf children does not exist, to my knowledge, and no effort was made to provide one. I felt, in fact, that it might be more helpful to have each school reply in light of its own investigation of mentally retarded deaf.

The eight schools responded to the survey questions in this way:

1. Do you accept mentally retarded deaf children?

Yes: 5 No: 3

2. What is your approximate IQ cut-off point for acceptance?

50-60; 65-70; 70-75; 60;
60; 75-80; 40-50; 75-80.

3. What is your cut-off point for hearing loss?

75-80dB; 65-70dB; 70-75dB; 80-85dB;
None; 80dB; 80dB; 80dB.

(These figures mean that generally for a child to be considered for admission his hearing loss in decibels would have to be at least at this level or below. Audiometric measurement is not the sole criteria for

determining a child's eligibility for admission to a school for the deaf, and each child is considered on an individual basis with many evaluative factors being taken into consideration.)

4. What form(s) of communication do you use for your "normal" deaf?

Choices were: Oral
 Signs
 Fingerspelling
 Total Communication - all of the previous plus amplification used simultaneously, plus the philosophical requirement that it be used with all children and at all grade levels.
In all instances amplification is almost always used.

Responses were: Oral - 3
 Oral and Fingerspelling - 1
 Oral, Signs, and Fingerspelling - 1
 Oral until Elementary then Total Communication - 1
 Oral supplemented by Signs and Fingerspelling
 at middle and upper school levels - 1
 Total Communication - 1

Of the five schools accepting mentally retarded deaf, three report using Total Communication with these children, one uses the Oral method and fingerspelling, and the other uses the Oral approach.

5. In answer to a question regarding the kind of curriculum followed, three schools report using an academically-oriented program, and two a vocationally-oriented program. In the three schools, some time is also used in prevocational training but not the major part of the day.
6. Only one school reported using a completely separate curriculum with the mentally retarded deaf. The other four schools make various adaptations to the regular school curriculum, and students operate at a considerably slower rate. Three of the schools separate the mentally retarded deaf educationally from the other students, while two do not.
7. Of the five schools accepting mentally retarded deaf, only three of them are residential schools. All three report that these children are not separated from other children in the dormitory.
8. The question was asked, "In the past two years approximately how many children has your school evaluated and classified as mentally retarded; how many were accepted for admission?"

School 1: none evaluated
2: 10 evaluated -- 4 accepted
3: 15 evaluated -- 4 accepted
4: 10 evaluated -- 0 accepted
5: 10 evaluated -- 5 accepted
6: 3 evaluated -- 3 accepted
7: 9 evaluated -- 9 accepted
8: 11 evaluated -- 11 accepted

Total number evaluated as mentally retarded was 68, with 36 of them being admitted to the schools. Referrals for those not accepted were made to local facilities, which include classes for the mentally retarded, BOCES, state institutions, and one school referred them back to the State Education Department.

9. Most of the schools indicated that teachers working with mentally retarded deaf were certified in the area of education of the deaf or held regular teacher certification. Several of these teachers had taken some course work in mental retardation but none were certified in this area.
10. Five of the schools reported that within a close geographic area there were programs for the mentally retarded being conducted, and that they would be most willing to participate in a joint effort to establish classes for the mentally retarded deaf.
11. The final request on the survey was for an explanation of the school's program for the mentally retarded deaf if they had one. It might have been more appropriate to ask if the school had a "department" for the mentally retarded deaf rather than a program. Those schools reporting the admission of mentally retarded deaf children do have a program for them at least in a modified way. Homogeneous class grouping, special curriculum adaption, and more appropriate standards of expectancy, but none of the schools maintain separate departments or units for the mentally retarded deaf. This would seem to indicate that in other ways these children are capable of maintaining themselves in the mainstream of the regular school program.

In several instances the individuals completing the survey qualified answers to specific questions and made interesting and pertinent comments. Although time does not permit citing all of these, several should be related to you, and I quote from survey replies:

"The approximate IQ cut-off point for acceptance varies, depending upon extent of other handicaps. I would question accepting someone who will eventually have to be institutionalized."

"There are special classes throughout the school. Although the student/teacher ratio is not any lower than regular classes, these children are academically isolated so that they may work at their own pace."

"Our multiply handicapped deaf are causing me many problems at this time. I do not think our school is able to cope with a program for the mentally retarded deaf now or in the immediate future."

"I think schools for the deaf should be responsible for educating those mentally retarded deaf who are considered educationally retarded and who do not need custodial help."

"Our grouping of MR deaf is on a functional basis. We have some very small, immature children who are functioning adequately in regular primary classes even though they are overage for the group. They do not progress through the years with the same group, however."

"I know it looks strange to see that we have nine children evaluated as mentally retarded although I have stated that we have no special program. This seemingly contradictory statement is true, nevertheless. We have the fact of the mental retardation from evaluation, but these children are being closely watched and re-evaluated because the staff does not totally agree with the findings."

"At the preschool this is the lowest (IQ 40-50) we have admitted. Rarely does IQ remain this low. Two or three years later the low has risen to 70-80 for a variety of reasons."

"At the present, we believe for our age children modified program and small functional grouping coupled with individualized programming meets our needs. Our experience points up more experimental deprivation than faulty gray matter--which condition can be modified with good educational intervention."

"Our program seems adequate to serve the deaf population in our area. It is a heterogeneous mix, with effort made to provide for children with special needs--bright, slow learning disabilities, etc. within the framework of the regular school program. It seems to work."

"The task of evaluating this group of children when they are young is particularly difficult, and I find both parents and other professionals unwilling frequently to accept this diagnosis, saying that the deafness is what is causing the slow development. Pediatricians usually don't even recognize young deaf children, to say nothing of a more complicated picture such as MR deaf. We also have found it useful to have a period of school attendance which is used as diagnostic observation, although parents sometimes "forget" that it was a trial placement."

The survey answers and the comments by those reporting would indicate conclusively that programming for retarded deaf youngsters does exist in at least five of the nine schools for the deaf in New York State, and in five of the eight schools which responded to the survey. The problem of terminology and nomenclature relevant to deaf children with low intelligence undoubtedly has influenced the responses in some way. For evaluation purposes in this school we accept the IQ range of 50-75 as educable retarded and 50 and below as trainable retarded. These figures would seem to be acceptable to the American Association on Mental Deficiency and also to the State Education Department. Applying these quotients to the admitting standards in the eight schools for the deaf we find that only one of the schools would admit trainable retarded deaf children, while the others which accept retarded at all take those children in the middle educable range.

I was surprised that only one school, the New York State School for the Deaf, made any comment about possible problems with mentally retarded deaf children out of the classroom structure itself. Our experience has been that most difficulties encountered with the MR deaf come about in the residential setting rather than the classroom. In the dormitories it is not possible to isolate into small groups the same children who are so placed in the education program. Physical facilities, staffing limitations, and sex differences prevent this from being feasible. Our residence program is a rather liberal one; students are given considerable freedom, charged with the responsibility for their own behavior; allowed to engage in activities without big brother hovering over them; held accountable for the independence which they are allowed. This system works only when the students themselves understand the values of this liberation from the more usual regimented, confining, and restrictive dormitory environment. Our retarded children find this difficult to cope with, and in turn we find it difficult to cope with them. The slower children cannot exercise the judgment necessary to know when they are pushing the limits of what is considered to be acceptable behavior. And, too, several of these children have done things which unknowingly have threatened their own safety and that of the other students.

This school, like all of the other schools for the deaf in the state, is geared basically to the education and care of the average deaf child. Even with exceptions at each end of the intellectual spectrum, a far greater percentage of the students are normal, average deaf children, especially, perhaps, in their ability to function adequately in the residential program.

As one reviews the current literature, there is little to be found on the subject of the mentally retarded deaf. There is great contradiction within what little there is and one can only conclude that this is due to the lack of a common denominator as a point of reference in discussing the problem.

One of the more recent studies done on any sizeable school population was that of Robert Anderson and Godfrey Stevens--"Policies and Procedures for Admission of Mentally Retarded Deaf Children to Residential

Schools for the Deaf," and reported in the January, 1970, issue of the American Annals of the Deaf. The schools responding included in their enrollments a total of 14,534 pupils, or 79.4% of the total number of pupils enrolled in residential schools for the deaf. The definition Anderson and Stevens used would place the upper IQ limit of mental retardation at about 83. A broad range of statistics were extrapolated from the responses they received, and I shall relate just a few of these for you.

Preferences for tests to obtain measures of intelligence on children under 7 years of age: Wechsler Intelligence Scale for Children (Nonverbal) 55%; Nebraska Test of Learning Aptitude 50%; Leiter International Performance Scale 45%; and, Goodenough: Draw-a-Man Test 40%. Preferences for other tests then dropped down to 13% and below. Most administrators responding to the survey indicated more than one test as a preference, which accounts for the percentage distribution.

Administrators were asked if a minimum intelligence test score had been established as a criterion for admittance to the school: 34% reported that it had, and 66% that it had not. The highest score used for admission was 90--the lowest was 50, with the mean score being 71.

A rather questionable question was, "What is a reasonable minimum IQ needed by a deaf child to be successful in your school?" The highest figure was 90, the lowest was 50, and the mean was 80.1. Since "Success" was not defined in the questionnaire, who knows against what standards these figures can be compared.

Before closing I would like to mention just a few of the potential problem areas that come to mind if the typical residential school for the deaf were to enroll in increasing numbers children more severely retarded than those presently in attendance. The development of special curriculums for both academic and prevocational areas. Staff training--both teachers and houseparents--neither of these groups has any real concept of the problems of mental retardation nor an understanding of how to best work with retarded deaf children. General staffing to attend to the needs of those young children who have few if any self-help skills. Acceptance by other students. Socialization problems. Dormitory placement. Parental acceptance: many parents attach a stigma to the singular word "handicap" and certainly to the term "mentally handicapped." As unjustified as it may be, and I have heard it many times, is the parent who says, "I don't want my deaf child going to school and living with the retarded." Particularly alarming to them seems to be the "living" with the retarded.

In conclusion, I think we have much to discuss over the next two days. Educators of the deaf and educators of the mentally retarded, officials in the State Education Department and in the Department of Mental Hygiene must come to a meeting of the minds; we must know what we are talking about and establish some standards for terminology; there is every evidence that this alone will require collaborative thinking and discussion; there is an obvious need for a more definitive study of

the incidence and prevalence of mentally retarded deaf children--a study which should be pursuant to the development of standard terminology and nomenclature with definitions based on a rationale acceptable to educators of the deaf and of the mentally retarded.

I believe strongly in the "child advocacy system," a concept which was introduced by mental health workers at the 1970 White House Conference on Children and Youth, and which has since become the rallying cry of many state mental health associations. This child advocacy concept promotes the advancement and protection of the physical, social, educational, emotional, and legal needs of children. Dr. Edwin W. Martin, Associate Commissioner, Bureau of Education for the Handicapped, U.S. Office of Education, states that the spirit of child advocacy will permeate special education and that we will increasingly be willing to assume an attitude of responsible caring for handicapped children and adults.

Our concern will reach down to the early years of life to assist in identifying potential learning and behavioral problems, to help parents in educating their children, to assist the child in finding other services he may need even if outside the school's traditional concerns, and ultimately to help the individual find educational and cultural stimulation throughout his lifetime. The problems involved in educating mentally retarded deaf children are great, but they are not insurmountable. With concern and effort expended on their behalf by people such as we have gathered in this room today, progress in this direction will surely come about.

EDUCATIONAL PROGRAMMING WITH RETARDED DEAF CHILDREN

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When Dr. Stewart invited me here to talk with you today about the educational needs of the mentally retarded deaf child, I accepted with enthusiasm. Since I first became interested in the deaf retarded, back in 1959, I have looked forward to a time such as this, when a broader interest among other professionals would bloom into full recognition of the deaf retarded as individuals with a challenging combination of learning disabilities. I must confess that I have been continuously appalled by the lack of services for these people and especially with the reluctance shown by professional personnel from both the areas of retardation and deafness in coming to grips with this problem.

Coming to grips with a problem such as this is not a simple task. The problem itself is frequently difficult to diagnose, in the sense that the deaf child who appears mentally retarded may, in fact, have normal intelligence but may actually be retarded by other factors. The primitive nature of our research and development in programming various forms of evaluation and services for the deaf retardate leaves much to be desired.

In the United States, there are an estimated 500,000 persons who are classified as deaf or deafened. About 20% to 35% of these people may be multiply handicapped, that is, having one or more disabilities in addition to their deafness. Of this number no research exists as to what percentage are mentally retarded.

The term "deaf" refers specifically to those whose hearing losses prevent auditory reception and the acquisition of normal speech. Such persons are distinguished from the hard of hearing, who have some functional reception of auditory communication. If we select a single factor as being descriptive of deaf people in general, the most widely accepted would be their dependence on their visual perception as a primary means of receptive communication.

There is ample evidence that deaf people are not necessarily dumb in the sense that they cannot speak. Frequently, however, they choose to remain mute in the face of repeated failure to be accepted, as deaf people with speech limitations, by their hearing peers in the community. Another problem is that many in the hearing community, as a result of misinformation, believe that any person, regardless of hearing loss, can be taught to speak and lipread "normally". Such thinking has deprived the deaf of a positive self-image and caused the general

public to expect performance in the area of communication which is, frequently, both unattainable and unrealistic for the deaf person.

Desirable is a more valid means of identifying the deaf child who is mentally retarded and not the victim of other influences--such as educational disturbance, or communication isolation. There is obvious need to determine the true nature of the child's retardation. Due, however, to the language and communication difficulties, the tools of mental measurement presently available frequently give marginal information. In spite of our progress in other areas, the evaluation of the deaf retarded child, who does not present any established clinical signs of mental deficiency, must still depend on prolonged, subjective observation by trained personnel.

Communication of course is a large part of the key. The low language level of the deaf child makes it doubly important that every means of visual and auditory input possible be utilized, for to limit input in any manner is to foster retardation in the deaf child--even those with normal mental capacity.

Unfortunately many of the educators in this country still subscribe to a fragmentated approach of communicating with the deaf child, supporting the use of one method or another rather than using total communication. The result of such limited educational schemes on the deaf child with normal mental development is often chaotic. Narrow approaches to communication such as "oralism" or "manualism" merely limit further the options available for optimal educational input. For the deaf child who is mentally retarded the use of anything short of everything in the way of communication merely adds to the problem.

The needs of this population will, of course, vary with the individual level, the setting--institutional or community--and the presence of additional disabilities. There is also some controversy as to the level at which we need to determine whether deafness or mental retardation is the primary disability. For the purpose of this meeting I will assume we are concerned with the type of child most likely to be encountered in a community program. With this in mind let us dwell on the so-called educable and trainable categories and focus on the problem as it is influenced by deafness.

In a normal population, to be deaf is to be different. The same holds true in a population which is predominantly mentally retarded. The deaf child is different and this difference frequently leads to a deep feeling of insecurity. We need to minimize this difference without losing sight of the fact that in the deaf child there is a difference that will not diminish with growth. We must develop the deaf child's strengths rather than dwell on his weaknesses. A positive relationship between family, school and the child can only come from a

total relationship, in which the child's auditory impairment is accepted and supplimented by increased visual input. This cannot be accomplished through limited, restrictive communication. In essence this means that we need to work closely with the child's family during the early years, to make them aware of the value of communicating with their child using all known means of communication presently available.

The deaf child may become both a retarded and socially isolated individual if he is led to believe that total communication is wrong--if he is led to believe that he must parrot his hearing peers in order to be accepted. I cannot stress this need strongly enough. This very real and important need, this need to have the deaf child's family, teachers and peers accept him as a child who cannot hear normally, but one who will grow and develop; who can be taught and will learn; who can develop a positive image of self as a deaf person if we will only accept him as such. If we approach the deaf retarded child as a person who cannot hear but who can learn visually--and if we build our curriculum on this strongest point, the child's visual channel, then we will be on the road to language--to English, if you will--and to later ease in the acquisition of speech and speechreading skills, all with a minimum of frustration on the part of the child and those around him.

For the purpose of today's meeting I would like to establish gross communication as the base-line for beginning an educational program for the deaf retarded child. By gross communication I refer first to isolated gestures with predetermined meaning. This has its parallel in the single word communication used verbally with young hearing retarded children. Following this, we have word combinations in gesture form until word clusters expressing thoughts or commands emerge. All communication of this type should always be presented in the total manner--that is, using speech, signs, facial expressions and pantomime, as well as the written word.

Gross communication must be uniform, pertinent and relative to the area under study. It must be comfortable to use and must take into consideration the verbal limits of the retarded deaf child, the need to get the right idea across and the need to do all of this with a minimum of frustration. Let me emphasize also that the gestures, or signs, to which I refer are not limited to concrete concepts. There are textbooks now available that offer a full range of standardized American signs. That many of our special education training programs for teachers of the deaf do not require their pupils to learn these signs is no reflection on their value as a teaching tool, but merely an indicator of programs that are shallow and narrow in scope.

Some of you may be familiar with the SEE system being used successfully with deaf children in southern California. Seeing Essential English is a refined and highly developed form of the single gesture-

concept approach to teaching language to the deaf. This system was first developed as a means of teaching mentally retarded deaf children, after all traditional methods had been exhausted.

The SEE concept evolved from the Lapeer Project in the early 60's. Several factors contributed to the development of SEE--foremost was the low language level and non-reading nature of the students, followed by the fact that many of them were "oral failures" from previous educational efforts. These factors, taken together, ruled out the use of any one method alone--language concepts on which to develop speech were extremely weak, the use of fingerspelling floundered on the non-reader, and the American sign language, when compared with the Basic English list of the more commonly used words, was found sadly lacking.

When used with the mentally retarded deaf child SEE was found to be highly effective. It was not and still is not fully developed. It depends heavily on the use of one gesture for one word and the problem, of course, is in developing a whole new system of visual signals. Much work remains to be done on this approach, but it holds great promise as a means of (1) developing a concept of language based on gross movement, (2) introducing the structure of English into the retarded deaf child's own language pattern and (3) maintaining a high degree of visual input for the non-reading deaf child until such a time that the basics of reading are mastered.

Another outgrowth of this concept has been further effort on the part of several rehabilitation people toward the development of specific job-oriented signs for tools, machines, and materials so that counselors and educators in vocational workshops can convey the purpose and function of various job tools in a clearer and more concise manner.

No educational program for the retarded deaf child is complete without adequate counseling. By adequate I mean total counseling that directly involves not only the counselor and the child, but also the child's teacher, family and significant others in his environment.

The Lapeer Project, and follow-up studies indicate that the deaf retardate tends to show a higher incidence of maladjustment than do hearing retardates. While this may be the result of several factors it is clear that the interaction of a multiple handicap such as retardation and deafness presents a greater liability to the individual in terms of the likelihood of developing maladjusted means of coping with the ordinary stresses of living. Retardation and deafness combined also tend to limit communication and without special attention to this problem the deaf retarded child will tend to become withdrawn and isolated. As a result of this withdrawl their perception of the world around them and the role and function of things in this world may be grossly affected. This misinterpretation of another person's

intentions and motivations appeared frequently among the deaf retarded in the Lapeer Project. However, the project also taught us that special education efforts and good supportive counseling utilizing free-flow communication can to some degree counteract the effects and the limitations of this multiple handicap.

There are a few additional observations regarding education for this population that I would like to share with you, some of which are rather obvious but sometimes overlooked. The dependence of the deaf retarded child on visual input makes it doubly important to emphasize the experiential approach. Only by getting the child out of the traditional classroom setting and into real life activities can the teacher begin to bridge the information gap caused by deafness. Media, while of paramount importance, is of only limited value when unaccompanied by related experiences. Another valuable tool is role-playing with full communication--the old saw of an action being worth a thousand words is especially true with the deaf retardate.

Experience in Lapeer indicated that the best results were obtained in working on a highly individual basis with groups of from 6 to 8 children. By keeping the groups small we were able to develop programs that devoted time to a broad range of interest areas, while permitting structured experience situations. The entire program was designed to follow through on pertinent pupil awareness. The classroom activities supported the workshop activities in that course work and vocabulary were coordinated with actual work being done. The living unit was also a situation where learning was stressed. Residential personnel were trained by teaching personnel to use total communication, were kept informed of day-to-day activities, and were oriented to function as comfortable, communicating parent substitutes.

During the initial phase of this program much attention was given to making the children as comfortable as possible with their deafness. Every effort was made to structure the total program in order to facilitate the development of uniform communication, segregation from hearing retardates was not emphasized, although it tended to evolve as time passed. In the sense that this inner grouping helped a great deal in developing communication and bolstering self confidence, it was good. It might be argued that these children, as they grew older, had to learn to integrate again in work-training situations. This was true--however I am convinced that the opportunity to communicate freely and to develop greater self esteem during earlier periods of "segregated" living was instrumental in enabling these mentally retarded deaf children to later cope with the demands of the sheltered workshop and community living phase through which they eventually passed--successfully.

In the early 60's, when the Lapeer Project took place, there were

no personnel available with training or experience to work with the mentally retarded deaf. Today, more than a decade later, the situation remains much the same. We have got to bring together the skills and knowledge gleaned from programs to train teachers of the mentally retarded and those to train teachers of the deaf. I know of no present-day effort to realistically face up to this very grave and very much-needed area of specialization. Methodology from both areas could be utilized but new methods will need to be developed to really tackle the job right. For too long the whole area of special service to the deaf child has ignored the reality of his need to communicate totally and freely, unhindered by the narrowness of past traditional special education theory.

RESOURCES

Seeing Essential English, Anaheim Union High School District, P.O. Box 3520, Anaheim, California, 92803. Two volumes totaling 543 pages, cost \$5.70, postpaid.

INSTRUCTIONAL MEDIA FOR MENTALLY RETARDED DEAF CHILDREN

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Instructional media, often referred to as educational media, is being utilized in varying degrees in schools for the deaf, rehabilitation facilities and post-secondary programs for the deaf. Some years ago Media Services and Captioned Films, Bureau of Education for the Handicapped, U. S. Office of Education, provided schools for the deaf and some rehabilitation facilities with overhead projectors. This enabled teachers to develop a form of visual reinforcement that was not before possible. The overhead projectors along with filmstrips, slides and movie projectors and instructional television provide a wide range of visual reinforcement and greatly enhance the learning environment of deaf students.

Dr. Robert Stepp stated, at the Dedication Workshop held at the Illinois School for the Deaf, that "these instructional resources offer unique contributions toward acquisition of information, development of concepts, realistic simulation of experiences, performance of skills, and actual involvement in the learning exercise. These contributions will vary according to the functions required of the media, and the extent of involvement will be dependent on the type of learning activity which is to be performed by the student. Selection of proper medium to serve a specific purpose is of utmost importance."

Yet, relatively few mentally retarded deaf children are benefitting from or being instructed through the use of new educational media. It is common knowledge that the success of teaching machines depends greatly upon available educational material and its use. The development of this material is very difficult, time consuming and sometimes costly. Commercially produced materials are often not appropriate for use with deaf learners, not to mention the mentally retarded and other multiple handicapped deaf.

Here I would like to take the opportunity to give an overview of the Media Services and Captioned Films program and some of its services.

Media Services and Captioned Films Branch of the Division of Educational Services, Bureau of Education for the Handicapped, U. S. Office of Education was established in an effort to alleviate the

ever widening educational, cultural and social gap between deaf persons and persons with normal hearing.

In addition to providing a free-loan service of acquired or specifically produced captioned films for deaf persons, P.L. 85-905, as amended, authorized MSCF to conduct research, training, production and distribution activities in the area of instructional media to provide for the educational advancement of the handicapped.

A second amendment, P.L. 89-258, enacted October, 1965, doubled both the authorization and appropriation for captioned films to \$3 million for fiscal 1966. The law also revised the objectives specified in the original legislation, thus permitting the program to make progress in other areas where the needs of the deaf had not been met.

The law as amended on April 13, 1970 through enactment of Education of the Handicapped Act, P.L. 91-230, Part F, expanded the authorization to allow for a way to utilize educational media as a means for improving the educational environment of other handicapped children as well as deaf individuals. This amendment established two distinctive programs: (1) captioned films for the deaf and (2) media services. It did not alter the film program for the deaf which is specifically a captioned film loan service for deaf persons. Appropriation for providing educational media services to other handicapped persons has not yet materialized, although the authorization is there.

P.L. 91-320 also authorized the Secretary to enter an agreement with an institution of higher education for the establishment and operation of a National Center on Educational Media and Materials for the Handicapped which will provide a comprehensive program of activities to facilitate the use of new educational technology in education programs for handicapped persons, including designing and developing, and adapting instructional materials and other such activities.

MAJOR ACTIVITIES

Research and Development

Activities initiated under this authority are developmental in nature, rather than pure research. They relate specifically to the production, evaluation, and demonstration of materials for use in such diverse programs as speech instruction, visual perception, cued speech, programmed language instruction, multi-media instruction of mentally retarded deaf persons, captioned television and career education packages.

Training

The training program is generally carried out by the four Regional Media Centers for the Deaf located at New Mexico State University, Las Cruces, New Mexico; University of Tennessee; University of Massachusetts, Amherst, Massachusetts. The training program consists of: 1) short-term workshops for teachers, dormitory personnel, parents, vocational counselors, and teachers in training among others; 2) three six-week summer institutes in instructional technology for educators of the deaf; and 3) the annual educational media symposium held in Lincoln, Nebraska, at the University of Nebraska.

Instructional Materials Centers

The Instructional Materials Centers Network has been transferred to the Media Services and Captioned Films Branch from the Division of Research. This further expanded our activities. Each Instructional Materials Center was planned to establish functional activities to accomplish the objectives of this new effort. Major functions of the IMC's are: 1) development of prototype materials and media needed by handicapped students; 2) training of teachers and other professionals who work with handicapped learners in media and materials utilization skills; 3) dissemination of information concerning media and materials for the handicapped; and 4) developing a delivery system for educational media and materials to give logistical support to the handicapped learner when and where he needs it.

Production

A greater percent of our materials are produced through joint production efforts of the Bureau of Education for the Handicapped and the four Regional Media Centers for the Deaf under contractual arrangements. Each center focuses on one or more specialties, i.e., transparency development, television applications, film and media production, curriculum and programmed instruction.

Acquisition

Major acquisition activities center on the procurement of media and materials and include auxiliary services as they relate to caption script and study guide preparations for instructional films, the screening and evaluation of materials for use in the program, and the distribution of materials.

Educational films and filmstrips which are distributed through our educational films depositories were screened, evaluated and recommended by teachers of the deaf for adaptation and/or cap-

tioning. They encompass a wide range of subjects on various educational levels. Many can be used effectively with mentally retarded deaf children. The captions and soundtrack are synchronized and are rarely above the third grade reading or language level. Titles and descriptions of the films are listed in MSCF's Catalog of Captioned Films for the Deaf: Educational Titles.

Three media programs that may be adapted for use with the mentally retarded deaf are: 1) Project LIFE materials, developed by National Education Association with support from MSCF, which were developed to facilitate language instruction to deaf children include programmed filmstrips and special books and picture dictionaries, 2) The "Learning Wall" developed by the Dubnoff School for Educational Therapy's Media for the Exceptional, another MSCF supported project, is a large rear projection screen at floor level which can be programmed to serve as a chalkboard, mirror, lighted table, or felt board. It facilitates student participation by permitting direct interaction with projected materials. An imaginative teacher using this "Wall" could do wonders with mentally retarded deaf children, and 3) The electronic assembly instructional system for the deaf, developed by the Thompson, Rams, Woolridge Systems, Inc., in California, can be used by older deaf retardates with a third grade reading level. It is an automated self-instruction programmed learning, visually presented course in basic electronics assembly for the deaf. The course consists of seven parts and covers about 100 hours of instruction. It enables a student to acquire basic electronic assembly skills, at a high level of proficiency, in about one semester. It is programmed in such a way that each student progresses at his own pace and structured in such a way that a student may complete only three of the seven parts and be qualified for a job as a simple assembler. The project was validated at three state schools for the deaf and one rehabilitation facility. MSCF is presently working on dissemination procedure.

The three aforementioned are just a sampling of some of our media projects. Most are designed for young deaf children. There is a need for more educational media for the multiply handicapped deaf youths, including the mentally retarded, with limited or non-existent reading skills. There is a greater need for career education media for all deaf children.

To help alleviate some problems involved with educating mentally retarded deaf children who are in classes with the average deaf, individualized programmed instruction could be applied. As mentioned earlier, media production is difficult and time consuming, yet it is possible if paraprofessionals or even students are used to assist with instructions and with the development of pertinent educational media. Often one would find that teacher-produced materials are

more appropriate for certain students than are commercially made materials. They are usually produced for a particular student or group of students for a specific purpose. To be practical it is essential that media be flexible enough to accomodate the wide range of individual capabilities.

As I retrospect on my teaching days, I recall the various teacher-made materials I used, especially with the "nonfeasible" or low achieving deaf persons. In Michigan with the disadvantaged deaf adults with little or no language or reading skills I used charts and transparencies for the overhead projector extensively. Most of the materials were designed and developed by Mrs. Edna Adler who was coordinator and supervising teacher at the time. The Technicolor 200 projector was added later--utilizing the finger-spelling and sign language film series. The only programmed instruction used was the basic math course developed by a company in Battle Creek, Michigan. At Project DEAF in Columbus, Ohio, a rehabilitation facility designed to provide diagnostic evaluation and occupational adjustment to multi-disabled persons, when I served as project director, we had various types of educational media. Most of the filmstrips series were designed for younger persons than were served by the project and were not well received. Again, we had to resort to teacher-made media. We also had access to the video-tape recorder-educational television system. Although it proved to be useful, especially in the areas of counseling and reinforcement, it could have been better utilized if we had the expertise and training in media utilization.

Another form of media or another medium that can be used in the education of mentally retarded deaf children, who lack adequate communication skills, whose educational, social or psychological development is below average and who cannot benefit from traditional methods, is total communication. It has proven to be valuable in situations where individual differences were taken into account since it encompasses all modes of communication--speech, lipreading, signing, fingerspelling, pantomime and demonstration. This is an excellent means of establishing communication and rapport with the deaf student, client or patient.

In closing, I, again, quote Dr. Stepp in saying that "the real secret in the utilization of media is to employ the resources as learning materials and not as teaching materials. The deaf student should be allowed to succeed or fail on his mental capacity and not on his hearing deficiency."

REFERENCE

- Stepp, Robert E. "Utilization of Educational Media in the Education of the Deaf", The Use of Instructional Media with Special Hearing Impaired Child, Illinois School for the Deaf, March 16-17, 1967, pp. 30-42.

FUNDING PROGRAMS FOR MENTALLY RETARDED DEAF PERSONS

Joseph C. Quinn
Director of Fiscal Services
Community Mental Health
State Department of Mental Hygiene
Division of Social Services

First, let me qualify my knowledge of our topic--I work for the Division of Local Services of the State Department of Mental Hygiene. I am directly involved only in the payment of State Aid for Community Mental Retardation Services. This relates to budgets, expenses and income of Mental Health and Mental Retardation programs operated by counties or voluntary agencies administered through County Community Mental Health Boards.

A County Mental Health Board is a unit of county government responsible for the planning, development and execution of programs for Mental Health, Mental Retardation, Alcoholism and other mental disabilities. They exist in every county and the City of New York. Programs under their jurisdiction may be operated by county personnel or by contract with private, voluntary agencies. They may provide inpatient and outpatient services, rehabilitation services, consultation services, emergency services and other services and may be hospital based or may be operated in separate facilities. The Boards employ a psychiatrist as the Director of the program and he may act as the administrator of large programs or as a combination clinician-administrator in smaller programs. Other staff may be employed to assist him.

Our programs range in size from under \$100,000 to over \$100,000,000 and contract agencies may have programs costing from a few thousand dollars up to many hundreds of thousands. The State reimburses for approved programs at a rate of 75% or 50%. In the course of my work I see some of the details of the funding of programs for the Mentally Retarded but I disclaim any real expertise on the subject--I have some knowledge of the subject. Some of you, particularly those actually administering programs, are undoubtedly better informed than I. As I attempted to do some modest research in preparation for this meeting, I became more and more aware of my limited knowledge. Mr. Phillip Fadgen of our program staff is also here today and may also be of assistance if you have questions.

Could I have a show of hands from those of you who now have contracts with a Mental Health Board--for you particularly, if I do not cover something which is of special interest to you, please let me hear from you after the panel is over.

Now--for some specifics. A local mental retardation program--usually an Association for Retarded Children Chapter--can have a contract with a Mental Health Board. That contract is usually written with a requirement that the agency contribute a share of the total cost of their program. That share, plus the share contributed by the county from tax funds, may range from 25% to 50% of the net cost of the Association for Retarded Children program. The State provides State Aid for the balance. If the program is approved, the State will pay State Aid for all eligible expenditures less any deductible income--the net deficit. There can be programs financed jointly by several counties.

The program may include Day Training, Pre-Vocational Training, Rehabilitation, a Workshop, a Hostel, Diagnostic and Evaluation Services, Speech and Hearing Therapy--a wide range of educational, training, therapeutic and related services. There is other legislation, State and/or Federal, which also supports many of these same services. Among these, I mention a few:

1. The Division of Vocational Rehabilitation of the State Education Department--which pays for training of workshop clients--certain staffing grants--certain equipment purchases--some of this from Federal programs--others from State funds.
2. The "4407" Education Law fund pays for education of certain students. There is also the "1004-A" Education Department support for extended sheltered employment in workshops.
3. There are other Education Department funds which you have heard about from Dr. Jacoby.
4. There are funds from the Social Services Department, the Health Department and other sources.
5. There is Federal support for programs and initial staffing grants.
6. There is a Hostel program for the mentally retarded administered by our Division of Mental Retardation.
7. A major source of funding is the "contract income" which many workshops realize from assembling, packing or production activities for private enterprise clients--and also the "Direct Sales" income from sales of their own products.
8. Counties provide local tax funds as partial support for their county operated programs and for some contract programs.
9. There is also income from a Community Chest or Red Feather agency and income from private contributions, fund-raising, etc.

10. There are funds for construction or rehabilitation of facilities in which programs may be operated--but that's a whole separate story.

Our Regional Offices in New York City, Albany and Rochester, can be of assistance on inquiry about possible funding sources.

In reimbursing under our program we will deduct all agency income except county tax funds, the Community Chest, private contributions and money realized from fund-raising activities.

So, in effect, we will deduct almost all the income before we reimburse on the net deficit. And, on that deficit we can provide, at most, 75% and frequently only 50%. The balance of net program costs must come from local funds--either county tax funds or Community Chest or other income from private sources--anywhere between 25% and 50% of the programs' cost.

The hand-out which I've distributed gives some picture of what one agency actually has experienced in finding funds. Even this may not be complete for this agency--nor is it necessarily indicative of what every agency can or should do. It was originally prepared only to illustrate the difficulty of accounting for funds--not as a guide to what funds are available.

I think the problems of agency financing are indicated by this paper--multiple sources of funds require multiple efforts to locate apply for and administer--if received. Planning for programs under such circumstances certainly is more difficult. Accounting for how one used the money--given the varieties of reporting requirements of the funding sources--is not easy.

Our State Aid program may cover the cost of staff, quarters, equipment, transportation, supplies and other necessary expenses. Since our program can support just about the same activities which other legislation supports--and the whole program, including that supported by other funds, must almost always be incorporated in the program covered by the Mental Health Board contract and approved by us, we consider that other funds are a reduction of the cost of our program and determine the net deficit accordingly. Also, many of these other funds are offered once or at a gradually declining rate and the deficit and our share of it rises accordingly.

At this time, on a net deficit basis, we are supporting about \$15 million dollars of mental retardation services throughout the State. Refining the actual costs might produce a somewhat higher figure.

As total program costs increase and as grant funds decline, agencies' net deficits also increase and our share of the deficit rises and so does the agencies' share. The agency must meet its proportionate share of a larger dollar deficit or county tax funds must make up the difference. And this becomes a limiting factor on program growth--and also may create financial distress for an agency.

One possible solution to this dilemma lies in a bill in the Legislature which we hope will pass next year. It is a "unified services" bill which will do much to change the roles of the State and Local governments in our field of interest. Plans, programs and costs will be "unified" and the sharing of costs by state and local government will be adjusted accordingly. We shall, in effect, pool state and local facilities, services and money and apportion costs between the State and counties in proportion to how each county chooses to provide or utilize services. The underlying goal is patient care in his community wherever such treatment is indicated.

Our studies showed that about 87% of the combined state and local program costs were covered by State services. To the extent that the county chooses to provide that service locally, if this legislation passed the State will bear 87% of the cost. This will, we hope, eliminate the existing incentive to send a person to a State facility, now paid for 100% by the State, rather than to a local service, now being reimbursed for by the State at somewhere between 50% and 75%. But the county will have the choice. If State facilities, now not charged against a county are still used, the county will be charged 13% of that cost.

Two versions of this bill with different cost sharing rates were before the Legislature this year and so the "unified services" concept is apparently viable--and next year may well produce the actual legislation.

FUNDING PROGRAMS FOR DEAF CHILDREN

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Division for Handicapped Children
New York State Education Department

Unlike most other states, New York State does not provide categorical aid to local school districts for the education of their handicapped children. State aid is given on a per capita expenditure basis for all children residing in the district who attend the public schools. The per capita allotment of State aid varies from district to district. Within each district, however, the per capita allotment is the same for handicapped children enrolled in special programs as it is for children who are enrolled in regular classes. The same amount of money is given for the deaf child as is given for the hearing child. The same amount is given even though the per pupil expenditure may be two or three times as much for the child with the hearing impairment than is for the child with normal hearing.

In spite of the lack of a differential, special programs for handicapped children do exist. They are mandated by law and they are expected to be carried out in accordance with the regulations of the Commissioner of Education. Cities such as Albany, Buffalo, Rochester, Syracuse, and Binghamton provide special programs for deaf children. New York City, as we heard yesterday, provides a special school for the deaf for over 600 children and within that school it offers a special program for almost 50 moderately mentally retarded deaf children. Other cities throughout the State provide special educational programming for deaf children. Self-contained classes for the deaf, resource room teachers for the deaf and hard of hearing, and itinerant teachers for the deaf are three types of programs that exist in a number of cities in the State as well as in several of the larger school districts. These programs may include mentally retarded deaf children but none of them, as far as I know, is structured to meet the needs of these particular multiply handicapped children.

There are many school districts with so few deaf children that can be grouped homogeneously that they are unable to offer adequate programs for retarded deaf children. In such cases the district may meet its obligations for these children by contracting for services with another school system or with a Board of Cooperative Educational Services.

If a district does not have adequate funds to pay for the tuition in another school district it may receive some State aid under the provisions of Section 4403 of Article 89 of the Education Law. The superintendent of the district recommends to the Judge of the Family Court that a sum of money be authorized to meet

cost of tuition, transportation and also maintenance where necessary for attendance at a public or private facility in another school district. When the Judge of the Family Court authorizes the expenditure the county is obligated to pay the total amount and the State agrees to reimburse the county for 50% of the amount paid by the county. At present there is a program for the deaf on Long Island that is subsidized from such funds--the Caritas Day School for the Deaf.

Under Section 4407 of the same article (Article 89) the State will pay up to \$2,000 for tuition for a severely handicapped child to attend a private school that has a State approved program when there are no appropriate public facilities for the education of this child. Where the tuition of the school exceeds this amount the parents may pay the difference or they may, on recommendation of the superintendent of the local school district, petition the Judge of the Family Court for the payment of the difference. This is possible under Section 4403 mentioned above. An example of a private agency serving deaf children that is funded through Section 4407 is the Hebrew Institute for the Deaf in New York City. Money is also available to this school through 4403 funding. The Institute provides education for a small number of multiply handicapped deaf. The Onondaga Association for Retarded Children located in Syracuse is approved for 4407 funding. During the past year this ARC established a program for a few retarded children who are deaf. The Federal Government is the source of funding for this particular project. Federal funding is also available through the Department of Mental Hygiene. More about Federal funds in a moment.

State aid is available to teachers who work with handicapped children. The aid is designed to enable teachers to meet State certification requirements. If you are presently teaching retarded deaf children and have a license in one area and wish to take courses leading to certification in the other area, you would be eligible for tuition assistance.

There are nine schools for the deaf that are listed in Section 4201 of Article 85 of the Education Law that receive direct State aid. Our host, the New York State School for the Deaf, is a State-operated school which is funded as an agency of the State Education Department. The other eight schools for the deaf are private institutions that receive State funds to cover the total cost of instruction and plant maintenance operation for State-appointed pupils. The same fiscal constraints that affect State aid to local school districts have affected the budgets of the State-operated and State-supported private schools. For the next year or two at any rate, it is not likely that State support to these schools will be increased to expand or develop new programs to meet the needs of the mentally retarded deaf children.

There is a considerable amount of Federal money available to local educational agencies for program development and expansion of services to meet the needs of handicapped children. Application for funds may be made to the State Education Dept., Division for Handicapped Children or to the Bureau for Education of the Handicapped in Washington, D.C. Federal assistance for projects relating to the mentally retarded deaf can be requested from appropriations available under Title VI of the Education of the Handicapped Act. Public school districts and Boards of Cooperative Educational Assistance are eligible to apply for Title VI funds to the State Education Dept. in Albany. It would be possible to establish a class for mentally retarded deaf or a program for the retarded or part of a program for deaf children. It would be possible to establish day programs in three different settings. A class for the mentally retarded deaf could be part of the program for the EMR or the TMR; it could be associated with classes for the deaf; or it could be a separate entity. In New York City PS 47 is eligible under Title VI for such funding.

Under Title I, PL89-313, the special schools for the deaf, both State-supported and State-operated, have access to funds for programs to meet the needs of the children who are not being adequately served. These same funds are available to the schools for the mentally retarded, supported by the Department of Mental Hygiene.

Federal stipends are available for teacher training during the summer under the Education of the Handicapped Act. I understand that there are several traineeships still available for this summer that could be used by teachers of the retarded or teachers of speech and hearing handicapped for courses dealing with communication problems of the deaf. Application forms can be had from the Division for the Handicapped.

THE DEAF MENTALLY RETARDED AND VOCATIONAL REHABILITATION

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In the quest to help deaf mentally retarded individuals prepare for a useful and satisfying life in society, the State-Federal program of Vocational Rehabilitation has played an increasingly vital role in recent years and, hopefully, will fulfill an even greater mission in the years ahead. It is my pleasure to tell you something about Vocational Rehabilitation and to suggest possible ways educators can work with Vocational Rehabilitation in the development of more viable and meaningful training programs for deaf mentally retarded youths and adults.

Vocational Rehabilitation is concerned essentially with helping physically, mentally, and emotionally handicapped individuals to build upon their strengths and overcome or substantially reduce their limitations to the point where they can obtain and hold gainful employment at a level commensurate with their potentialities, interests, and personal characteristics. In order to accomplish this goal Vocational Rehabilitation agencies in all the states provide their clients with a wide range of services including evaluation, counseling and guidance, physical restoration, prosthetic appliances, vocational training, post-secondary education (career preparation), sheltered workshop experiences, job placement, and follow-up. Some of these services are provided by the Vocational Rehabilitation counselor (counseling and guidance, job placement and follow-up), while others are purchased for the client by Vocational Rehabilitation by contract from a wide variety of community resources. Clients who have the financial resources to do so contribute some to their own rehabilitation, whereas those who are unable to pay for certain services are provided these free of charge.

Aside from these direct services to the handicapped, the State-Federal program of Vocational Rehabilitation engages in a number of other important activities that contribute substantially to the welfare of handicapped people. The Federal agency, the Social and Rehabilitation Service of the U.S. Department of Health, Education and Welfare is responsible for implementing the legislation as enacted by the Congress through the Vocational Rehabilitation Act and its subsequent amendments. For example, through SRS Federal matching funds are allocated to the states; a program of consultation services is provided to the state agencies; a very active program of research and demonstration is conducted designed to advance the frontiers of rehabilitation; grants are provided to universities for the purpose of training professional and paraprofessional rehabilitation workers in such fields

as counseling, medicine, audiology, and speech pathology; and grants are provided for the development and/or expansion of rehabilitation facilities.

During the past decade the State-Federal Vocational Rehabilitation program has made truly outstanding contributions to expanding the employment horizons of deaf people. Most state vocational rehabilitation agencies now employ counselors who specialize with deaf clients and, consequently, can provide better services. There are increasing numbers of post-secondary training facilities that provide special supportive services to deaf students. Significantly, there are now ample opportunities for employment of deaf people as professionals and paraprofessionals in these facilities and other rehabilitation programs that serve deaf people.

It has only been in the last few years that Vocational Rehabilitation has made significant inroads in the area of service to the deaf mentally retarded. This slow start was occasioned by one of the three legal requirements associated with the provision of Vocational Rehabilitation services. Specifically, the three general criteria that have been used in determining eligibility for V.R. services are:

1. That the client have a physical, mental, or emotional disability;
2. That the disability present a substantial handicap to employment;
3. That there be a reasonable expectation that, through the provision of V.R. services, the individual can be prepared for gainful employment.

This third criterion prevented V.R. agencies from serving the severely handicapped, since in most cases there was some doubt as to whether such clients could be assisted to the point where they could become gainfully employed.

Not long ago, however, the V.R. legislation was revised and it became possible for Vocational Rehabilitation to accept the severely handicapped and provide them with what is called "extended evaluation" for as long as 18 months. It thereby became possible during this 18 month period not only to evaluate the client but also to provide him with basic personal and work adjustment training that would enable him to reach a point where he would be a "good risk" for V.R. to accept for full services. It was this change--the provision for extended evaluation--that opened the door to Vocational Rehabilitation for the mentally retarded.

Since the mid-1960's there have been a small number of rehabilitation programs for deaf people whom we may view as severely handicapped. Many of these severely handicapped deaf people have been mentally retarded, of course. These programs for the severely handicapped have been few and far between, and only the Hot Springs Rehabilitation Center, Hot Springs, Arkansas, has offered a

comprehensive residential-type training program. Other programs for the severely handicapped deaf are located in New York City (New York Society for the Deaf); Columbus, Ohio; Plainwell, Michigan; Cave Spring, Georgia; and St. Louis, Missouri.

The 1972 Amendments to the Vocational Rehabilitation Act contain provisions for the establishment and operation of regional comprehensive rehabilitation facilities for low achieving deaf adults. When these facilities become operational in a year or so they can be expected to provide excellent training opportunities to those deaf people who do not possess the ability to attend existing post-secondary training programs for the deaf.

The Future

I think it is reasonable to say that Vocational Rehabilitation holds great promise for mentally retarded deaf youths and adults. This promise can be realized in the State of New York through the following activities:

1. The employment of Vocational Rehabilitation counselors who specialize with deaf people. This specialization will insure that these counselors acquire the knowledge, skills, and interest that are basic to successful casework with the deaf in general and the mentally retarded deaf in particular.
2. The establishment of cooperative work-study programs between Vocational Rehabilitation and educational programs for the mentally retarded deaf. Such cooperative programs would include assignment of a V.R. counselor to the educational program on a part- or full-time basis, and the initiation of V.R. services for the individual mentally retarded deaf child at the age of 15 or 16 years.
3. The establishment of a regional comprehensive rehabilitation facility for low achieving deaf people within the State of New York. This would be feasible since the number of low achieving deaf people in the state is large enough to justify such a facility, and on a regional basis it would be filled immediately. Without such a facility I am afraid the mentally retarded deaf in the state will never be able to fully realize their potentials.

There is much that can come about for mentally retarded deaf people from joint planning on the part of education and vocational rehabilitation. With a continuum of structured educational, vocational, and social learning experiences, I am confident that the majority of mentally retarded deaf children and youths can be helped toward a life of reasonable independence and productivity.

RECOMMENDATIONS FROM GROUP DISCUSSIONS

During the two-day Special Study Institute on Deafness and Mental Retardation, the participants--who represented the areas of agency and school administration, psychology and counseling, classroom instruction, audiology and speech, nursing, physical and occupational therapy, and graduate education--met in small groups for the purpose of reacting to the presentations made by the Institute speakers and to consider how the needs of deaf mentally retarded children and youth in the State of New York could best be met. These small group discussions ranged over a variety of problems and needs, but the following summary encompasses the basic ideas that were covered. These are being presented here with the hope that they will serve as a stimulus toward increased educational, social, and vocational opportunities for deaf mentally retarded people.

I. Short Term and Degree Training

- A. The Problem. At this time there are few, if any, professional or paraprofessional workers who have had the benefit of training in the areas of deafness and mental retardation. As a consequence, these workers--teachers, psychologists, counselors, curriculum planners, audiologists and speech therapists, supervisors--are unnecessarily limited in their effectiveness in helping mentally retarded deaf children.
- B. The Need. There is a pressing need for short-term training opportunities for practicing professionals and paraprofessionals to help them upgrade their skills in working with mentally retarded deaf children. This need includes periodic Special Study Institutes, summer school credit-bearing coursework, and full degree programs covering curriculum development, special diagnostic techniques, instructional techniques, program development, research, and instructional media in the area of the deaf mentally retarded.
- C. Recommendations. It is recommended that the State of New York Department of Education and the Division of Mental Hygiene initiate planning with selected universities in the state for the purpose of developing appropriate short-term and degree training opportunities designed to upgrade the skills of professionals and paraprofessionals who are working, or wish to work, with deaf mentally retarded children and youths.

II. Agency and School Planning for the Mentally Retarded Deaf Child.

- A. The Problem. At the present time no systematic efforts are being made to provide deaf mentally retarded children and

youths with a comprehensive statewide network of educational, social, and vocational training opportunities. Instead, opportunities for this group of children are sporadic and minimal, falling far short of the need and demand.

- B. The Need. There is an urgent need for the State of New York Department of Education and the Division of Mental Hygiene to initiate joint planning with schools for the deaf, BOCES programs, and schools for the mentally retarded for the purpose of planning and developing a comprehensive statewide network of diagnostic and remedial instructional programs for the deaf mentally retarded. Leadership at the state level is essential to achieve a comprehensive program.
- C. Recommendations. It is recommended that the State of New York Department of Education and the Division of Mental Hygiene give high priority to initiating planning with schools for the deaf, BOCES programs, and schools for the mentally retarded for the purpose of developing a comprehensive statewide network of diagnostic and instructional programs for the mentally retarded deaf.

III. Curriculum and Instructional Materials Development.

- A. The Problem. The area of education of deaf mentally retarded children has yet to benefit from the recent advances and innovations that have characterized the field of mental retardation and the field of deafness. The reasons for this seem to be: (1) deaf mentally retarded children have many problems and needs that are not common to hearing mentally retarded children or common to deaf children having normal intelligence; and, (2) their numbers are relatively small in comparison with the numbers of hearing mentally retarded children and the numbers of deaf children with normal intelligence. Thus, because of their relatively small numbers and their uncommon problems and needs, they have been "neither fish nor fowl" but educated as one or the other rather than as deaf mentally retarded children. Consequently, educators, curriculum planners, researchers and media developers have yet to mount a truly meaningful attack on the barriers to independence for these children.
- B. The Need. There is a fundamental need for the development of an appropriate curriculum for the education of deaf mentally retarded children, and for a variety of instructional media which will enhance their learning.
- C. Recommendations. It is recommended that the New York State Department of Education and the Division of Mental Hygiene initiate joint planning whereby selected universities would establish cooperative programs with schools and classes for deaf mentally retarded children to develop a comprehensive curriculum

and appropriate instructional media for these children.

Consideration should be given to requesting Syracuse University to help with media development, Yeshiva University to help with curriculum development, and New York University to help with research and program evaluation. A laboratory school might be established wherein new concepts and materials can be tested and evaluated.

IV. Communication Methods

- A. The Problem. Increasing evidence is accumulating which demonstrates that the combined use of speech, speechreading, sign language, and fingerspelling results in better communication between the teacher and the deaf child. However, many classes for mentally retarded deaf children continue to be taught with emphasis upon oral communication and little if any use of manual communication (fingerspelling and sign language). This exclusion of manual communication can be considered as not being in the best interests of the child, for it forces him to limit his avenues for self expression and reception of language.
- B. The Need. There is a basic need for teachers of deaf mentally retarded children to become proficient in and utilize all methods of communicating with deaf children. Moreover, these teachers should adopt the philosophy of total communication, which encourages the free use of all methods of communicating without placing a stigma on any one method.
- C. Recommendations. It is recommended (1) that all teachers of deaf mentally retarded children learn and use manual communication in combination with speech and sound amplification in communicating with these children; and, (2) that the State of New York Department of Education, Bureau for Physically Handicapped Children, and the Division of Mental Hygiene, Department of Mental Retardation, establish the policy that top priority for state funding of programs for deaf mentally retarded children be given to those programs which incorporate the use of total communication in their instructional program.

V. Deaf Professionals and Paraprofessionals

- A. The Problem. At the present time, there are very few deaf individuals serving in professional or paraprofessional capacities in the areas of program administration, instruction, pupil personnel services, or supervision in programs for deaf mentally retarded children. This situation appears to exist not because of an under supply of such manpower but because of anachronistic attitudes toward deaf people on

the part of (ironically) present program administrators.

- B. The Need. There is a need for equal employment opportunities for deaf professionals and paraprofessionals in programs for deaf mentally retarded children. Properly qualified deaf adults can be excellent role models for deaf children, and in addition many deaf adults often possess an extra degree of insight into the problems and needs of deaf children that enables them to provide a deep level of commitment to their work. The criterion that often precludes a deaf person being hired--that his speech is inadequate--is irrelevant in view of the obvious fact that deaf children cannot hear speech. In fact, at least three outstanding programs for the multiply handicapped deaf have been directed by deaf individuals, and many, many deaf people are presently serving the deaf in various capacities across the nation.
- C. Recommendations. It is recommended (1) that all programs for the deaf mentally retarded actively recruit qualified deaf individuals to fill professional and paraprofessional roles; and, (2) that the State of New York Department of Education, Bureau for Physically Handicapped Children, and the Division of Mental Hygiene, Department of Mental Retardation, give priority for awarding state funds to those programs for the deaf mentally retarded which by policy and practice provide equal employment opportunities to qualified deaf individuals.

VI. Parent, Professionals and Deaf Community Involvement.

- A. The Problem. One of the reasons that services and programs for mentally retarded deaf people have lagged so far behind those for other handicapped people is that parents, professionals and members of the deaf community have not become actively involved in pressing for new and expanded opportunities for the deaf mentally retarded.
- B. The Need. At the present time, when priorities for service are often established on the basis of public demand, it is important that parents, professionals, and members of the deaf community work together to bring the need for programs for the deaf mentally retarded to the attention of individuals and agencies responsible for funding programs for the handicapped. Thus, the need for organized efforts is indicated.
- C. Recommendations. It is recommended that parents, teachers of the deaf, and members of the deaf community place high priority upon seeking better programs for deaf mentally retarded children, and provide their support to schools or agencies that request such programs.